

Amendments to the Specification:

Please replace the paragraph at page 11, from line 1 through line 21, with the following paragraph:

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-- a peptide according to the invention, which is a ligand of the ORL1 receptor. Said naturally occurring ligand was purified on the basis of its anticipated ability to inhibit forskolin-induced cAMP accumulation in stable recombinant CHO(ORL1+) but not in non recombinant CHO(ORL1-) cells. The ligand is a novel neuropeptide which resembles the endorphin dynorphin A [9, 19] and whose amino acid sequence is F-G-G-F T-G-A-R-K-S-A-R-K-L-A-N-Q (SEQ ID NO: 2). Two other peptides were also isolated. Their amino acid sequences are : F-S-E-F-M-R-Q-Y-L-V-L-S-M-Q-S-S-Q (SEQ ID NO: 3) and T-L-H-Q-N-G-N-V (SEQ ID NO: 4). The first synthetic heptadecapeptide inhibits adenylate cyclase with an IC^{50} 1 nM in CHO(ORL1+) cells in culture and, when administered in vivo, induces hyperalgesia in mice. The latter effect is consistent with the observation that in vivo inhibition of ORL1 expression with an antisense oligonucleotide induces hypoalgesia in these animals. Taken together, our data support the notion that the first discovered heptadecapeptide is a potent ORL1 receptor agonist and that it is endowed with pronociceptive properties. The second discovered heptadecapeptide presents also pronociceptive properties.--